

METHOD OF INCREASING PRODUCT EXPRESSION
THROUGH SOLUTE STRESS

Abstract

5 A method of determining the optimal level of product expression and cell growth of
animal cell culture is described. The method generally comprises culturing cells under
conditions of solute stress, that is, under conditions whereby optimal cell growth or growth
rate is decreased yet levels of product expression are increased. In a preferred embodiment of
the invention is described a method of increasing the yield of monoclonal antibodies
comprising culturing hybridoma cells in an environment of solute stress. One approach to the
10 creation of such an environment is the addition of inorganic salts, organic polyols, or metabolic
products to the culture medium. One- to three-fold increases in antibody yield have been
obtained by these methods.